

November 1 - 6, 2003

<P>The Terra spacecraft is in nominal mode. All instruments are in Science Mode.</P>

<P>The Solid State Recorder (SSR) Anomaly Investigation Team met on Wednesday, November 5, 2003, continuing the investigation of the string of SSR Printed Wire Assembly (PWA) anomalies that occurred on July 30, September 24-25, and October 14, 2003. The anomaly team will split into two groups, one concentrating on analysis of the component materials and radiation effects, while the other works at defining the procedure and assessing risks in association with potential recycle of the Data Memory Unit (DMU) boards to attempt to re-acquire use of the affected PWAs. A preliminary dry-run Command Authorization meeting (CAM) covering the recycle is planned for November 17. There are no firm plans to recycle the DMUs at this time.</P>

<P>Personnel from the AETD radiation branch will be providing Total Ionizing Dose (TID) information to the Anomaly Investigation Team to help determine if the TID can change the leakage currents (or other critical parameters) enough to push the current limiter circuit close to the edge of stability and into a regime of marginal operation resulting in the observed effects on the PWAs.</P>

<P>The high number of High Gain Antenna (HGA) Motor Drive Assembly (MDA) resets from solar proton-induced Single Event Upsets (MDA2BITE failures) occurring in association with the large Coronal Mass Ejections has subsided. The timing of some of these events resulted in a small amount of data loss, as it was not possible to get the HGA reconfigured in time to complete SSR dumps during specific passes. Reaction Wheels ran higher during specific intervals around the poles due to the fact that the Three-Axis Magnetometer (TAM) was briefly saturating during polar traverses as a result of the high solar particle flux.</P>

<P>Plans:

The lunar calibration roll maneuver for MODIS for November will not be conducted due to the fact that it would need to occur close to one of the predicted peaks of the Leonid meteor shower.</P>